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Sent: Friday, February 11, 2005 2:04 PM

To: Torres, Francine

Cc: neil@blackpearlsinc.com%inter2
Subject: organic fish standards

Francine Torres
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Hello Francine,

We are pleased that USDA is developing standards for organic fish. As you are no doubt aware, there is a large and growing interest in this subject, both from consumers and many producers. We fully understand the complexities of this issue and want to contribute by providing comment from the producer's point of view. We are developing the largest open ocean fish farm in the country, and only the second in the nation. We are striving to produce the healthiest product possible, and it would be of great help to us and consumers to have some sort of accepted standards for farm reared fish.

While it may seem that ocean-based food production is very different from its land-based counterparts, there similarities we should consider.

AIR / WATER EQUIVALENTS

Terrestrial farm animals breathe air, and marine farmed animals breathe water. Both are highly variable in quality, pollution levels, and physical characteristics and move all around the globe. Organic standards for land-based farms are not based on air quality, and marine farms should not be either. There is no possible way to know how the water characteristics will change day-to-day, or year-to-year. Pollutants falling out of the air on the grass on an organic farm is not part of the standards, and the occasional peaks in concentrations of what may or may not be considered "chemicals" should not be included in aquatic farming standards either. If a farmer sets up in a known polluted area, they do so at their peril, as aquatic animals do not thrive in such areas anyway. Water quality standards should not be considered in classifying organic standards.

FORAGE GRASS / FORAGE BAITFISH

Just as a farmer only has limited control over the grass that grows in his fields, fish farmers have little control over the plankton and baitfish that are harvested for ingredients to make fish food. The argument that you cannot use fisheries products for fish feed just because "you don't know where have been" does not make any sense. If there is sufficient concern about "pollutants" in the fish feed, it seems the only reasonable answer would be for feed to be tested for these chemicals, and develop standards.

ORGANIC STANDARDS / BEST PRACTICES STANDARDS These has been a lot of confusion regarding these subjects. One does not necessarily have anything to do with the other. The conditions and environmental criteria necessary for fish health is extremely variable depending on fish species, climate, depth of water, amount of current, and any number of other variables. A lot of people are fixated on salmon farming and think all rules should be based on the methods used for this

fish. There has been an effort for animal welfare groups and the like to insinuate their agenda into organic standards. How many fish you have in a cage, or how often you feed them, or how you harvest should not be part of the organic standards. If these subjects are to be regulated, it should be in the Best Practices arena.

METHODS OF CULTURE

Broodstock

There is a concern by some people over all use of "chemicals" in all the stages of production including broodstock. Regardless of what might be done as far as treating the broodstock to clean them up of parasites, infections etc., there is no way anything is going to be transferred to the baby production fish.

Egg Treatment

Egg washing is also another subject that has come up. It is standard practice to clean up fish eggs with iodine, ozone, or formalin. Otherwise larval culture suffers from infections coming from dirty eggs. In our species for instance, larval culture would be impossible without this step. These chemicals are only used for an hour or so and do not penetrate inside the eggs. It is washed completely off the eggs, and again does not get carried on to the baby fish.

Fish Treatment

Occasionally fish get injured or sick. Proper management techniques can drastically reduce the incidence of these problems, but occasionally these problems crop up. There are only a very few approved treatment options available, but they can be essential to the survival of the fish when certain problems crop up.

We can certainly understand the sensitivity about this subject as the treatments are being done on the fish that are going to be eaten. This is especially relevant when these treatments become routine or prophylactic and treatment chemicals remain in the fish. However, there are approved treatments with chlorine, oxygen peroxide, ozone, altered salinity, iodine, or the like that leave no residual traces in the fish. These treatments should be allowed in organic specifications.

Occasionally antibiotic treatment is necessary in a particular batch of fish. USDA recognizes this and allows land-based farms to use antibiotics in emergencies, and it does not affect their organic status. I am sure there needs to be limits in these applications, but there should be some allowance approved treatments for emergencies.

PRODUCT TESTING

A lot of these problems could be solved by rational testing procedures and declarations similar to product statements on most other food products. Maybe some acceptable limits on the levels of chemicals in question could be developed. Maybe it would not have to be under an "Organic" standard, but some other "Clean" standard. This way people would know exactly what is in the fish.

I would be happy to talk to discuss any of these subject with you further.

Aloha,

Dale Sarver

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